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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* NARAYAN P. MENON and  
G.R. ROEDER

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Appeal 2009-009430  
Application 10/803,374  
Technology Center 3600

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Decided: February 23, 2010

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Before HUBERT C. LORIN, ANTON W. FETTING, and  
JOSEPH A. FISCHETTI, *Administrative Patent Judges*.

LORIN, *Administrative Patent Judge*.

DECISION ON APPEAL

## STATEMENT OF THE CASE

Narayan P. Menon, et al. (Appellants) seek our review under 35 U.S.C. § 134 of the final rejection of claims 1-26. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

## SUMMARY OF DECISION

We AFFIRM-IN-PART.<sup>1</sup>

## THE INVENTION

The invention relates to a method and system for providing communications services. Specification: [0002].

Claims 1, 12, and 19 reproduced below, are illustrative of the subject matter on appeal.

1. An apparatus comprising:

- a trunk interface unit having a plurality of subscriber ports, each port being coupled to a trunk of a central telephone switch

- a plurality of subscriber line interface cards, each coupled to a subscriber port to provide loop interface functions to the central telephone switch;

- a subscriber interface module associated with each subscriber line interface card;

- a radio transceiver to communicate with a wireless cellular communications network using a wireless trunk;

- a control section coupled to each subscriber line interface card, to each of the subscriber interface modules, and to the radio transceiver to receive voice and signaling from each of the subscriber

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<sup>1</sup> Our decision will make reference to the Appellants' Appeal Brief ("App. Br.," filed Jan. 30, 2007) and Reply Brief ("Reply Br.," filed Feb. 6, 2009), and the Examiner's Answer ("Answer," mailed Jan. 12, 2009).

line interface cards to package and format the received voice and signaling for the wireless communications network and, using the subscriber interface modules, to coordinate and control over the air protocols of the wireless communications network, and

a wireless access communications unit to route calls from user stations coupled to the central telephone switch to the wireless cellular communications network in response to a command received from the central telephone switch.

12. A method comprising:

receiving a command from a central telephone switch at a wireless access communication unit, the switch being coupled to user stations;

routing calls from user stations coupled to the switch alternately to a wireless cellular communications network using a wireless trunk or to a wired switched telephone network in response to the received command.

19. A machine-readable medium having stored thereon data representing instructions which, when executed by a machine, cause the machine to perform operations comprising:

receiving a command from a central telephone switch at a wireless access communication unit, the switch being coupled to user stations;

routing calls from user stations coupled to the switch alternately to a wireless cellular communications network using a wireless trunk or to a wired switched telephone network in response to the received command.

## THE REJECTION

The Examiner relies upon the following as evidence of unpatentability:

Sicher

US 2001/0015968 A1

Aug. 23, 2001

The following rejection is before us for review:

1. Claims 1-26 are rejected under 35 U.S.C. §102(e) as being anticipated by Sicher.

### ISSUE

The issue is whether the Appellants have shown error in the Examiner's rejection of claims 1-26 under §102(e) as being anticipated by Sicher.

### FINDINGS OF FACT

We rely on the Examiner's factual findings stated in the Answer.  
Answer 3-5.

### PRINCIPLES OF LAW

#### *Anticipation*

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987).

### ANALYSIS

The Appellants argued claims 1- 26 as a group (App. Br. 7: "Only Claim 1 is discussed herein in order to simplify this appeal."). We select claim 1 as the representative claim for the group of apparatus claims 1-11 and 23-26, claim 12 for the group of method claims 12-18, and claim 19 for "medium" claim 19-22, and the remaining claims 2-11 and 23-26, claims 13-

18, and claims 20-22 stand or fall with independent claims 1, 12, and 19, respectively. 37 C.F.R. § 41.37(c)(1)(vii) (2007).

*Apparatus claims 1-11 and 23-26.*

The Examiner takes the position that Sicher expressly describes all the limitations of the subject matter set forth in the claims, relying on the disclosure at paragraphs [0016], [0017], [0029]-[0034], and [0039]-[0042] of Sicher.

Focusing on claim 1, the Appellants argue that various claim limitations are not disclosed in Sicher, for example, the limitations “a trunk interface unit having a plurality of subscriber ports, each port being coupled to a trunk of a central telephone switch;” “a plurality of subscriber line interface cards, each coupled to a subscriber port to provide loop interface functions to the central telephone switch;” and, “a control section coupled to each subscriber line interface card.” App. Br. 8. *See also* Reply Br. 3-4.

We have reviewed paragraphs [0016], [0017], [0029]-[0034], and [0039]-[0042] of Sicher and find that these passages do not expressly describe all the claim limitations of the apparatus claims.

Both independent apparatus claims 1 and 23 require “a trunk interface unit having a plurality of subscriber ports, each port being coupled to a trunk of a central telephone switch.” It is not entirely clear to us what component of all those described in paragraphs [0016], [0017], [0029]-[0034], and [0039]-[0042] of Sicher corresponds to the claimed “a trunk interface unit having a plurality of subscriber ports, each port being coupled to a trunk of a central telephone switch.” In response to the Appellants’ brief, the Examiner stated that this limitation is taught in Fig.2 by the reference

element 14 (E-IWF). According to the Examiner, element 14 (E-IWF) “enables a mobile subscriber to make an IS-136 voice call to another Internet subscriber (s) or to a landline terminal. Therefore, the trunk interface is readable as item 14 (E-IWF).” Answer 4. Based on this response, we presume the Examiner is construing the trunk interface unit as claimed to be identical to Sicher’s E-IWF (Enhanced Interworking Function).

Sicher’s E-IWF performs “interworking functions between mobile-specific voice encoding protocols and Voice-over-IP encoding protocols”. Sicher : [0013]. The E-IWF 14 depicted in Sicher’s Figures “provides the interworking necessary to translate from the specialized air-interface encoding methods directly to Voice-over-IP encoding utilized for data transmission over the Internet”. Sicher : [0029]. “The E-IWF 14 enables a mobile subscriber to make an IS-136 (digital) voice call to another Internet subscriber or to a landline terminal via an IP-based network (for example, the Internet) without going through the PSTN and an extra analog conversion”. Sicher : [0028]. Sicher’s E-IWF 14 is thus a type of interface. *See also* Sicher [0041] which describes the E-IWF acting as an “interface” between the cellular network and the Internet Service Provider and thereby supporting routing, authentication, and firewall functions.

It is reasonable to view Sicher’s E-IWF 14 as an interface between a cellular network and the Internet. But we do not find that one of ordinary skill in the art would find Sicher’s “interface” to be identical to “a trunk interface unit having a plurality of subscriber ports, each port being coupled to a trunk of a central telephone switch” as claimed. There must be no

difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. *Scripps Clinic & Research Found. v. Genentech Inc.*, 927 F.2d 1565, 1576 (Fed. Cir. 1991). Here, Sicher fails to describe an interface as “having a plurality of subscriber ports, each port being coupled to a trunk of a central telephone switch”. Claims 1 and 23. Accordingly, Sicher does not expressly describe the claimed apparatus. It is well settled that in order for the examiner to establish a *prima facie* case of anticipation, each and every element of the claimed invention, arranged as required by the claim, must be found in a single prior art reference, either expressly or under the principles of inherency. *See generally, In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997); *Diversitech Corp. v. Century Steps, Inc.*, 850 F.2d 675, 677-78 (Fed. Cir. 1988); *Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick*, 730 F.2d 1452, 1458 (Fed. Cir. 1984). That has not been done here. Accordingly, we will not sustain the instant rejection under §102(e) of the apparatus claims 1-11 and 23-26.

*Method claims 12-18*

The Appellants have limited their arguments in the briefs to challenging the rejection of apparatus claim 1. Those arguments rest on the view that Sicher does not disclose certain elements of the apparatus set forth in claim 1. However, these claims - claims 12-18 - are drawn to a process and do not include the argued-over apparatus elements. For example, the apparatus element “a trunk interface unit having a plurality of subscriber ports, each port being coupled to a trunk of a central telephone switch”



which we found not to be expressly described in Sicher is not included in the method claims. Given that the Appellants have made no argument as to the patentability of the method claims, we find that the Appellants have not shown error in the Examiner's rejection of claims 12-18 under 35 U.S.C. §102(e) as being anticipated by Sicher.

*“Machine-Readable Medium” claims 19-22*

We reach the same conclusion as to these “medium” claims (claims 19-22) as we did for the method claims. Given that the Appellants have made no argument as to the patentability of the “machine-readable medium” claims, which like the method claims do not include the argued-over apparatus elements, we find that the Appellants have not shown error in the Examiner's rejection of claims 12-18 under 35 U.S.C. §102(e) as being anticipated by Sicher.

Furthermore, we observe that independent claim 19 describes the “machine-readable medium” as “having stored thereon *data representing* instructions”. Emphasis added. As reasonably broadly construed, the claimed “machine-readable medium” is not limited to having stored thereon the *actual* instructions “which, when executed by a machine, cause the machine to perform operations [as claimed]” (claim 19). Rather, claim 19 covers more broadly a medium containing “data representing” those instructions.

Since “data” is ordinarily and customarily defined as “information” (*see Webster's New World Dictionary* 352 (3<sup>rd</sup> Ed. 1988.) Entry for “data”) and “represent” is ordinarily and customarily defined as “portray” (*see*

Webster's New World Dictionary 1139 (3<sup>rd</sup> Ed. 1988.)Entry 1 for "represent"), Claim 19 reasonably broadly encompasses any type of information, such as text, that represents the recited instructions.

Representational information may be nonfunctional descriptive material if there is no functional relationship between it and the medium that contains it. Patentable weight need not be given to descriptive material absent a new and unobvious functional relationship between the descriptive material and the substrate. *See In re Lowry*, 32 F.3d 1579, 1582-83 (Fed. Cir. 1994); *In re Ngai*, 367 F.3d 1336, 1339 (Fed. Cir. 2004). *See also Ex parte Mathias*, 84 USPQ2d 1276, 1279 (BPAI 2005) (nonprecedential) (Federal Circuit Appeal No. 2006-1103; WL 2433879 affirmed without written opinion Aug. 17, 2006).

In that regard, we see nothing in the claim that would lead us to find a new functional relationship between the "machine-readable medium" and the "*data representing* instructions" stored thereon. Consequently, independent claim 19 is reasonably broadly construed as covering a "machine-readable medium" having representational information stored thereon. We also observe that machine-readable mediums having information per se stored thereon are generally well-known as components of a computer (*e.g.*, memory) and thus would be inherent to the computers disclosed in Sicher.

### CONCLUSIONS

We conclude that the Appellants have shown that the Examiner erred in rejecting claims 1-11 and 23-26 under 35 U.S.C. §102(e) as being anticipated by Sicher.

We conclude that the Appellants have not shown that the Examiner erred in rejecting claims 12-22 under 35 U.S.C. §102(e) as being anticipated by Sicher.

### DECISION

The decision of the Examiner to reject claims 1-26 is affirmed-in-part.

### AFFIRMED-IN-PART

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